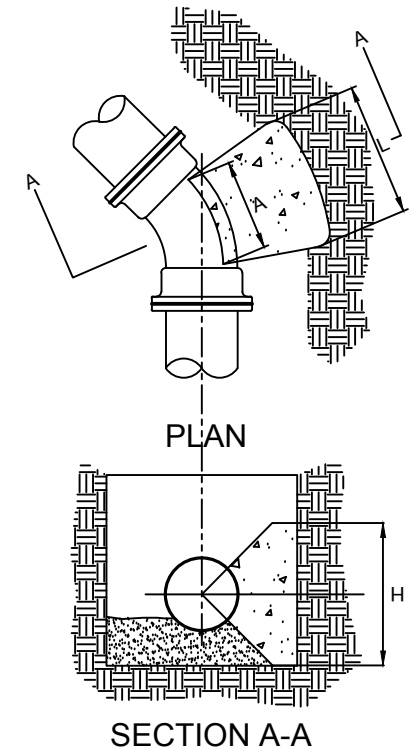


SCALE: NTS

NOTES:

1. L<sub>(WATER)</sub> DIMENSIONS IN THE TABLE ARE BASED ON A WATER PRESSURE OF 150 PSI, AN EARTH RESISTANCE OF 2 TONS PER SQ. FT., A FACTOR OF SAFETY OF 1.5 AND IS TO BE USED FOR STANDARD WATER MAINS AND WATER SERVICES.
2. L<sub>(FIRE)</sub> DIMENSIONS IN THE TABLE ARE BASED ON A WATER PRESSURE OF 200 PSI, AN EARTH RESISTANCE OF 2 TONS PER SQ. FT., A FACTOR OF SAFETY OF 1.5 AND IS TO BE USED FOR FIRE LINES AND COMBINATION FIRE / WATER SERVICES.
3. DIMENSION (A) SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH MECHANICAL JOINT BOLTS.
4. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POUR IS AGAINST FIRM UNDISTURBED EARTH AND SURFACE AREA (H x L) MATCHES THAT LISTED IN THE TABLE.
5. IF IN-SITU SOILS HAVE AN EARTH RESISTANCE OF LESS THAN 2 TONS PER SQ. FT. THE BUTTRESS AREA SHALL BE INCREASED PROPORTIONALLY.
6. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.
7. REFER TO VILLAGE STANDARD SPECIFICATIONS FOR WATER MAIN.



BUTTRESS DIMENSIONS

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	PIPE	11¼ DEG. BEND			22½ DEG. BEND			45 DEG. BEND			90 DEG. BEND		
2	SIZE	H	L <sub>(WATER)</sub>	L <sub>(FIRE)</sub>	H	L <sub>(WATER)</sub>	L <sub>(FIRE)</sub>	H	L <sub>(WATER)</sub>	L <sub>(FIRE)</sub>	H	L <sub>(WATER)</sub>	L <sub>(FIRE)</sub>
3	4"	0'-8"	0'-5"	0'-5"	1'-1"	0'-6"	0'-6"	1'-3"	0'-10"	0'-10"	1'-4"	1'-6"	1'-6"
4	6"	1'-2"	0'-6"	0'-6"	1'-6"	0'-9"	0'-9"	1'-8"	1'-4"	1'-4"	1'-10"	2'-2"	2'-2"
5	8"	1'-3"	0'-9"	0'-9"	2'-0"	1'-0"	1'-0"	2'-0"	1'-11"	1'-11"	2'-4"	3'-0"	3'-0"
6	10"	1'-3"	0'-10"	1'-2"	2'-0"	1'-1"	1'-5"	2'-0"	2'-1"	2'-9"	2'-4"	3'-4"	4'-5"
7	12"	1'-4"	1'-2"	1'-6"	2'-6"	1'-2"	1'-7"	2'-6"	2'-4"	3'-2"	2'-8"	4'-1"	5'-5"
8	14"	1'-6"	1'-4"	1'-10"	3'-0"	1'-4"	1'-10"	3'-0"	2'-8"	3'-6"	3'-0"	4'-11"	6'-6"
9	16"	2'-0"	1'-4"	1'-9"	3'-0"	1'-9"	2'-4"	3'-0"	3'-5"	4'-7"	3'-0"	6'-4"	8'-5"
10	18"	2'-6"	1'-4"	1'-9"	3'-6"	1'-10"	2'-6"	3'-6"	3'-8"	4'-11"	3'-6"	6'-9"	9'-1"
11	20"	2'-9"	1'-6"	2'-0"	3'-9"	2'-2"	2'-10"	3'-9"	4'-2"	5'-7"	3'-9"	7'-9"	10'-4"
12	24"	3'-0"	1'-11"	2'-7"	4'-3"	2'-8"	3'-7"	4'-3"	5'-4"	7'-1"	4'-4"	9'-7"	12'-10"

BUTTRESS FOR BENDS

DETAIL: W - 5

DATE: 8-4-16

APPROVED BY: MATT FINEOUR

VILLAGE OF PLEASANT PRAIRIE  
KENOSHA COUNTY, WISCONSIN